

**What is claimed is:**

1. A method of processing data in a receiver apparatus used in a wireless communication system, the receiver apparatus comprising a medium access control (MAC) layer and a radio link control (RLC) layer for processing data units, the method comprising the steps of:

communicating a data unit and a cyclic redundancy code (CRC) check result associated with the data unit from the MAC layer to the RLC layer;

examining in the RLC layer that the CRC check result sent from the MAC layer that indicates whether the data unit has an error; and

discarding the data unit when the data unit has error and when an error handling scheme is not provided.

2. The method of claim 1, wherein the error handling scheme comprises an instruction associated with a delivery of erroneous SDU.

3. The method of claim 1, wherein the data unit comprises a protocol data unit.

4. The method of claim 1, wherein when the data unit has error by examining the CRC check result and when the error handling scheme is provided, then the error handling scheme indicates one of deliver the data unit to a higher layer with an error indication, discard the data unit, and deliver the data unit to a higher layer without an error indication.

5. A receiver apparatus for processing data in a wireless communication system, the receiver apparatus comprising:

a medium access control (MAC) layer that transfers a data unit and a cyclic redundancy code (CRC) check result associated with the data unit; and

a radio link control (RLC) layer in communication with the MAC layer, the RLC layer receiving from the MAC layer the data unit and the CRC check result, wherein the RLC layer examines the CRC check result sent from the MAC layer that indicates whether the data unit

has an error, and discards the data unit when the data unit has error and when an error handling scheme is not provided.

6. The receiver apparatus of claim 5, wherein the error handling scheme comprises an instruction associated with a delivery of erroneous SDU.

7. The receiver apparatus of claim 5, wherein the data unit comprises a protocol data unit.

8. The receiver apparatus of claim 5, wherein when the data unit has error by examining the CRC check result and when the error handling scheme is provided, then the error handling scheme indicates one of deliver the data unit to a higher layer with an error indication, discard the data unit, and deliver the data unit to a higher layer without an error indication.

9. A method of processing data in a receiver apparatus used in a wireless communication system, the receiver apparatus comprising a medium access control (MAC) layer and a radio link control (RLC) layer for processing data units, the method comprising the steps of:

communicating a data unit and a cyclic redundancy code (CRC) check result associated with the data unit from the MAC layer to the RLC layer;

determining in the RLC layer that the CRC check result indicates the data unit has an error; and

processing the data unit in accordance with one of a first manner and a second manner, the selection of one of the first manner and the second manner based upon at least an operation mode.

10. The method of claim 9, wherein the data unit is processed in the first manner if the operation mode is one of unacknowledged mode (UM) and acknowledged mode (AM).

11. The method of claim 9, wherein the data unit is processed in the second manner if the operation mode is transparent mode (TM).

12. The method of claim 9, wherein the first manner comprises discarding the data unit in the RLC layer.

13. The method of claim 9, wherein the second manner comprises checking whether an error handling scheme has been provided.

14. The method of claim 13, wherein if the error handling scheme is not provided, then the data unit is discarded.

15. The method of claim 13, wherein if the error handling scheme is provided, then the data unit is processed according to the error handling scheme.

16. The method of claim 13, wherein the error handling scheme comprises an instruction associated with a delivery of erroneous SDU.

17. The method of claim 16, wherein the delivery of erroneous SDU instruction indicates one of deliver an erroneous SDU to a higher layer with an error indication, discard an erroneous SDU, and deliver an erroneous SDU to a higher layer without an error indication.

18. The method of claim 9, wherein the data unit received from the MAC layer does not include a header information associated with the MAC layer.

19. The method of claim 9, wherein the data unit received from the MAC layer is associated with a logical channel that is mapped in a 1:1 ratio with a transport channel.

20. A receiver apparatus for processing data in a wireless communication system, the receiver apparatus comprising:

a medium access control (MAC) layer that transfers a data unit and a cyclic redundancy code (CRC) check result associated with the data unit; and

a radio link control (RLC) layer in communication with the MAC layer, the RLC layer receiving from the MAC layer the data unit and the CRC check result, wherein the RLC layer examines the CRC check result sent from the MAC layer that indicates whether the data unit has an error, and processes the data unit in accordance with one of a first manner and a second manner, the selection of one of the first manner and the second manner based upon at least an operation mode.

21. The receiver apparatus of claim 20, wherein the data unit is processed in the first manner if the operation mode is one of unacknowledged mode (UM) and acknowledged mode (AM).

22. The receiver apparatus of claim 20, wherein the data unit is processed in the second manner if the operation mode is transparent mode (TM).

23. The receiver apparatus of claim 20, wherein the first manner comprises discarding the data unit in the RLC layer.

24. The receiver apparatus of claim 20, wherein the second manner comprises checking whether an error handling scheme has been provided.

25. The receiver apparatus of claim 24, wherein the error handling scheme comprises a delivery of erroneous SDUs instruction.

26. The receiver apparatus of claim 25, wherein the delivery of erroneous SDUs' instruction indicates one of deliver an erroneous SDU to a higher layer with an error indication,

discard an erroneous SDU, and deliver an erroneous SDU to a higher layer without an error indication.

27. The receiver apparatus of claim 20, wherein the data unit received from the MAC layer does not include a header information associated with the MAC layer.

28. The receiver apparatus of claim 20, wherein the data unit received from the MAC layer is associated with a logical channel that is mapped in a 1:1 ratio with a transport channel.

29. A method of processing data in a receiver apparatus used in a wireless communication system, the receiver apparatus comprising a physical layer and a medium access control (MAC) layer for processing data units, the method comprising the steps of:

communicating a data unit and a cyclic redundancy code (CRC) check result associated with the data unit from the physical layer to the MAC layer;

determining in the MAC layer that the CRC check result indicates the data unit has an error;

examining the data unit for presence of header information associated with a MAC header; and

discarding the data unit if the header information is present;

checking whether an error handling scheme is provided if the header information is not present.

30. The method of claim 29, wherein the data unit is discarded if the error handling scheme is not provided.

31. The method of claim 29, wherein the data unit is processed according to the error handling scheme if the error handling scheme is provided.

32. The method of claim 29, wherein the error handling scheme comprises an instruction associated with a delivery of erroneous SDU.

33. The method of claim 32, wherein the delivery of erroneous SDU instruction indicates one of deliver an erroneous SDU to a higher layer with an error indication, discard an erroneous SDU, and deliver an erroneous SDU to a higher layer without an error indication.

34. A receiver apparatus for processing data in a wireless communication system, the receiver apparatus comprising:

a physical layer that transfers a data unit and a cyclic redundancy code (CRC) check result associated with the data unit; and

a medium access control (MAC) layer in communication with the physical layer, the MAC layer receiving from the physical layer the data unit and the CRC check result, wherein the MAC layer examines the CRC check result sent from the physical layer that indicates whether the data unit has an error, and further examines the data unit for presence of header information associated with a MAC header and discarding the data unit if the header information is present and checking whether an error handling scheme is provided if the header information is not present.